DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Casey, William
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-028987
Date Inspected: 15-Jan-2013

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: American Bridge/Fluor Enterprises, a JV

OSM Arrival Time: 700
OSM Departure Time: 1730
Location: Job Site

CWI Name: William Sherwood

Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**CWI Present:**	☑ Yes	☐ No	
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☐ Yes	☐ No	☑ N/A
				Approved WPS:	☑ Yes	☐ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: SAS Tower

Summary of Items Observed:

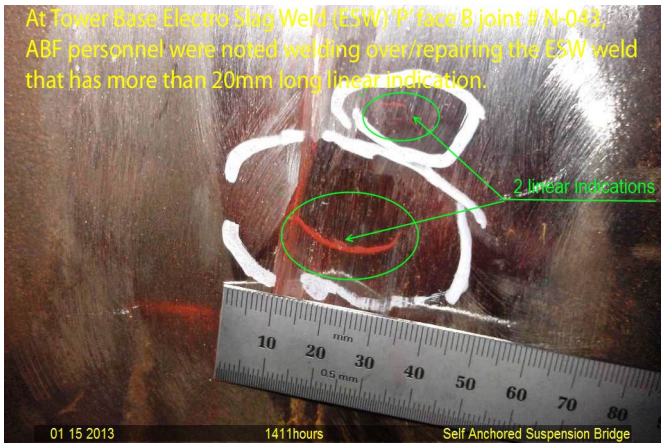
Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at the Self Anchored Suspension (SAS) job site as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

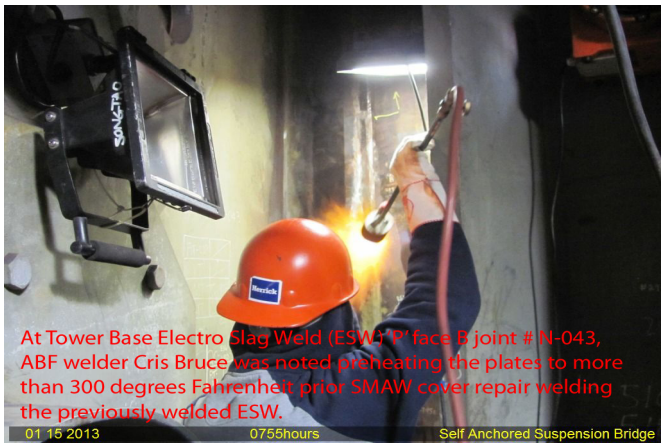
At Tower Base Electro Slag Weld (ESW) 'Q' weld joint #E-043 face B, ABF welder Cris Bruce was observed perform 3G welding repair on the weld cover on previously welded ESW from Y=6000mm to Y=8000mm due to VT/MT reject. The welder was noted utilizing Shielded Metal Arc Welding (SMAW) with 1/8" diameter E7018H4R electrode implementing ABF-WPS-D15-1000 Repair. The surface of the areas that were welded was ground smooth and was having depth of less than 5mm. These areas were also tested by ABF QC William Sherwood using Magnetic Particle Testing (MT) with no relevant indications noted. This QA also performed the same test and noted same result. Prior welding, ABF personnel have preheated the repair area to more than 300°F using propylene gas torch. During the shift, the ABF QC William Sherwood was noted monitoring the welding parameters and workmanship of the repairs being welded.

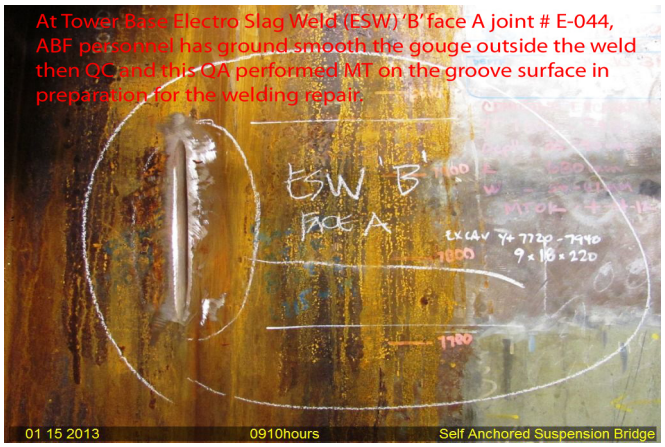
After the weld cover repair completion of ESW 'Q' from face B, the same welder has moved to ESW 'P' face B and performed the same weld cover repair due to VT/MT reject. The welder was observed performing repair from Y=6000mm to Y=9870mm. The welder was noted utilizing Shielded Metal Arc Welding (SMAW) with 1/8" diameter E7018H4R electrode implementing ABF-WPS-D15-1000 Repair Rev. 3. The surface of the areas that were welded was ground smooth and was having depth of less than 5mm. These areas were also tested by ABF QC William Sherwood using Magnetic Particle Testing (MT) with no relevant indications noted. This QA also performed the same test and noted same result. Prior welding, ABF personnel have preheated the repair area to

more than 300°F using propylene gas torch. During the shift, the ABF QC William Sherwood was noted monitoring the welding parameters and workmanship of the repairs being welded.

During the MT Inspection of the ground surface of ESW ‘P’ face B at Y=6075mm, ABF QC Steve Jensen has found two linear indications that one was more than 20mm and the other was around 8mm long. Upon further investigation from QC, they found out that the area just mentioned that has the linear indication is a bolt hole that has been plugged during the Electro Slag Welding process of the same butt joint ‘P’. One of the QC thought that since ABF will be re-drilling the same hole when they install the Tower skirt, it was okay to weld over the two linear indications. This QA thought that that was not the right thing to do so QA has informed QC to ask for instruction from Engineer which QC never did. Due to this infraction of welding over linear indication, an Incident Report was generated.







Summary of Conversations:

No significant conversation occurred today.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact SMR Gary Thomas (916) 764-6027, who represents the Office of Structural Materials for your project.

WELDING INSPECTION REPORT

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Inspected By:	Lizardo,Joselito	Quality Assurance Inspector
Reviewed By:	Reyes,Danny	QA Reviewer